

In the paragraph at page 9, line 21, through page 10, line 6:

Operating system 212 and application programs [218] 222 and 224 are computer programs (software) residing within or upon a computer-readable medium (such as a memory or a floppy disk) and comprising computer-executable instructions (i.e., executable by a processor of a computer) running on a computer such as that which has been described in conjunction with FIG. 1. Operating system 212 is an operating environment, and may be any type of environment running a computer that provides a graphical user interface. Commonly available graphical-user-interface operating environments include versions of Microsoft Windows, as has been described.

In the paragraph at page 10, line 16, through page 11, line 2:

In the case of operating system 212, application code 214 provides for the functionality of the operating system, such as the manner by which input/output (I/O) devices (printers, monitors, etc.) are accessed within and by the computer, etc. Controls code 216 provides for graphical user interface 204 itself, including user-controllable pointer 206. In case of application program [218] 222, application code 220 provides for a particular functionality, while controls code [222] 218 provides for controls 208 displayable within graphical user interface 204. Similarly, in the case of application program 224, application code 226 provides for a particular functionality, while controls code 226 provides for controls 210 displayable within graphical user interface 204.

In the paragraph at page 11, lines 3-10:

In one embodiment of the invention, the plurality of controls for a given computer program (such as controls 208 of program [218] 222, or controls 210 of program 224) has a first configuration in which at least one of the controls is opaque, and a second configuration in which at least one of the controls is at least semi-transparent. The occurrence of a particular event switches the plurality of controls between the first and the second configurations. Thus, for

program [218] 222, in a first configuration at least one of the controls 208 is opaque, and in a second configuration, at least one of the controls 208 is at least semi-transparent.

In the paragraph at page 13, lines 8-15:

In FIGs. 4(a)-4(c), diagrams showing operation of controls of a computer program displayable within a graphical user interface, according to another embodiment of the invention, are shown. Referring first to FIG. 4(a), within graphical user interface 400, user-controllable pointer [402] 302 is shown as not positioned over any of the controls of control bar 404. Control bar 404 may represent the controls of a video cassette recorder (VCR) or digital video disc (DVD) player. Control bar 404 is fully opaque (minimum transparency), and thus clearly visible. FIG. 4(a) represents a first configuration of these controls.

IN THE CLAIMS

Please add the following new claims 25-77:

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25. The computerized system of claim 1, wherein the particular event includes positioning of the user-controllable pointer within the graphical user interface relative to the at least one display.
 26. The computerized system of claim 1, wherein the particular event comprises selection of a particular display in conjunction with a user-controllable pointer within the graphical user interface.
 27. The computerized system of claim 1, further comprising:
 - a processor; and,
 - a computer-readable medium,wherein the at least one computer program is executed from the computer-readable medium by the processor, and the operating environment is provided from the computer-readable medium by the processor.

28. The computer of claim 27, wherein the computer-readable medium comprises a memory.

29. A computer-readable medium for a computer having an executable program stored thereon comprising:

means for causing the computer to perform a particular functionality; and,

means for providing a plurality of controls for use with the particular functionality and displayable within a graphical user interface, the plurality of controls having a first configuration in which at least one of the controls is opaque, and a second configuration in which at least one of the controls are at least semi-transparent,

such that occurrence of a particular event switches the plurality of controls between the first and the second configurations.

30. The computer-readable medium of claim 29, wherein the particular event comprises particular positioning of a user-controllable pointer within the graphical user interface relative to at least one of the controls.

31. The computer-readable medium of claim 29, wherein the particular event comprises selection of a particular control in conjunction with a user-controllable pointer within the graphical user interface.

32. The computer-readable medium of claim 29, wherein the medium is a floppy disk.

33. A computerized system comprising:

an operating environment having a graphical user interface including a user-controllable pointer;

at least one computer program, each computer program having a plurality of controls displayable within the graphical user interface, the plurality of controls having a first configuration in which at least one of the controls is opaque, and a second configuration in which

at least one of the controls are at least semi-transparent,

such that occurrence of a particular event switches the plurality of controls between the first and the second configurations.

B¹ 34. The computerized system of claim 33, wherein the particular event comprises particular positioning of the user-controllable pointer within the graphical user interface relative to at least one of the controls.

35. The computerized system of claim 33, wherein the particular event comprises selection of a particular control in conjunction with the user-controllable pointer within the graphical user interface.

36. The computerized system of claim 33, wherein all of the controls are opaque within the first configuration of the plurality of the controls.

37. The computerized system of claim 33, wherein the at least one of the controls within the second configuration of the plurality of the controls are completely transparent.

38. A computer comprising:

a processor;

a computer-readable medium;

an operating environment having a graphical user interface including a user-controllable pointer, the environment provided from the computer-readable medium by the processor; and,

at least one computer program, each computer program executed from the computer readable medium by the processor and having a plurality of controls displayable within the graphical user interface, the plurality of controls having a first configuration in which at least one of the controls is opaque, and a second configuration in which at least one of the controls are at least semi-transparent,

such that occurrence of a particular event switches the plurality of controls between the

first and the second configurations.

39. The computer of claim 38, wherein the particular event comprises particular positioning of the user-controllable pointer within the graphical user interface relative to at least one of the controls.

40. The computer of claim 38, wherein the particular event comprises selection of a particular control in conjunction with the user-controllable pointer within the graphical user interface.

41. The computer of claim 38, wherein the computer-readable medium comprises a memory.

42. A computer program comprising:

application code to cause a computer on which the program is running to perform a particular functionality;

controls code to provide a plurality of controls for use with the particular functionality and displayable within a graphical user interface, the plurality of controls having a first configuration in which at least one of the controls is opaque, and a second configuration in which at least one of the controls are at least semi-transparent,

such that occurrence of a particular event switches the plurality of controls between the first and the second configurations.

43. The computer program of claim 42, wherein the particular event comprises particular positioning of a user-controllable pointer within the graphical user interface relative to at least one of the controls.

44. The computer program of claim 42, wherein the particular event comprises selection of a particular control in conjunction with a user-controllable pointer within the graphical user interface.

B' 45. The computer program of claim 42, wherein the particular functionality of the application code comprises a virtual appliance mimicking a device external to the computer on which the computer program is running.

46. A computerized control management system, comprising:
a computer coupled to a graphic display and having a user-controllable pointer;
an application program operating on the computer; and
a control element displayable on the display, wherein the application program is responsive to the control element, and further wherein the control element has two or more sets of display characteristics, wherein a first set of display characteristics is substantially opaque and a second set of display characteristics is substantially non-opaque and wherein the set of display characteristics displayed is a function of the distance between the control and the pointer.

47. The computerized system of claim 46, wherein the application program is responsive to a plurality of controls wherein each control is a member of at least one group of controls and all controls in a group are operative at a predetermined point in the execution of the program and are displayed using a first set of display characteristics.

48. The computerized system of claim 46, wherein the control element is displayed in a graphical user interface.

49. The computerized system of claim 46, wherein the pointer is user-controllable in a graphical user interface.

50. A computerized control management system, comprising:
a computer coupled to a display and having a user-controllable pointer;
an application program executable on the computer;
a control element on the display, wherein the control element is defined by boundaries,

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wherein the application program is responsive to the control element, and further wherein the control element has two or more sets of display characteristics, wherein a first set of display characteristics is substantially opaque and a second set of display characteristics is substantially non-opaque and wherein the set of display characteristics changes when the pointer is within the boundaries of the control.

51. The computerized control management system of claim 50, having at least two groups of controls, wherein the group of controls that are operative are a function of the state of execution of the application program.

52. The computerized control management system of claim 51, wherein the controls in a group of controls have two or more sets of display characteristics, wherein the set of display characteristics for the controls in a group are a function of the distance between the pointer and a control in the group.

53. The computerized control management system of claim 50, wherein a first set of display characteristics is substantially a first color and a second set of display characteristics is substantially a second color.

54. The computerized control management system of claim 50, wherein a first set of display characteristics includes a contrasting boundary and the interior of the boundary is non-opaque.

55. A method of managing controls wherein the controls affect the operation of an executable application program on a computer wherein the computer has a display, a graphical user input environment and a user-controlled pointer, the method comprising:

displaying a user-controlled pointer on the computer display;

executing an application program having at least one control wherein the application program is responsive to the control and wherein the control has a boundary and an interior and at least two sets of selectable display characteristics; and

B' displaying a selected set of display characteristics for the control wherein the selected set of display characteristics is a function of the position of the pointer relative to the position of the control.

56. The method of claim 55, wherein the application program has two or more groups of controls and further wherein displaying a selected set of display characteristics for the control includes displaying a selected set of display characteristics for a group of controls.

57. The method of claim 55, further including selecting a first set of display characteristics if the pointer is within the boundaries of a selected control and selecting a second set of display characteristics if the pointer is not within the boundaries of a selected control.

58. A computer system, comprising:

a computer;

a display coupled to the computer and having a pointer wherein the position of the pointer is user-controllable;

one or more application programs operating on the computer and responsive to the pointer;

one or more groups of controls, wherein each group has one or more user-accessible control, wherein at least one application program is responsive to a user-accessible control, and the one or more groups of controls each has two or more display modes wherein each display mode is a set of display characteristics, and further wherein each control has a position and boundaries; and

a control program, operating on the computer, for controlling the display mode of groups of controls.

59. The computer system of claim 58, wherein the control program controls the display mode of the one or more groups of controls as a function of the distance between the pointer and a control.

B 60. The computer system of claim 58, wherein the control program controls the display mode of the one or more groups of controls as a function of the state of an application program.

61. The computer system of claim 58, wherein the control program controls the display mode of the one or more groups of controls as a function of the occurrence of a predetermined event.

62. The computer system of claim 58, wherein the control program controls the display mode of the one or more groups of controls as a function of the position of the pointer relative to the position of a control.

63. The computer system of claim 58, wherein the control program changes the display mode of the one or more groups of controls when the position of the pointer is within the boundaries of a control.

64. The computer system of claim 58, wherein a display mode includes a set of display characteristics that are substantially opaque.

65. A method for controlling a computer, the computer having a display and operating at least one application program responsive to a user-controlled pointer and responsive to actuation of at least one control selected from at least one set of controls, wherein at least one control has at least two modes of display wherein each mode includes a set of display characteristics, and each control has boundaries and a position, the method comprising:

executing the application program;

displaying one or more sets of controls as a function of the application program;

comparing the position of the pointer with the position of at least one control;

determining the state of at least one application program; and

selecting the mode of at least one set of controls.

B 66. The method of claim 65, wherein determining the state of at least one application program includes determining which controls are operative at the time of determination.

67. A computer system, comprising:

a graphical user interface having at least one control, the at least one control having at least one action and a variable opacity capable of changing in response to an event;

controls code to provide a plurality of control programs to display the graphical user interface, at least one of the plurality of control programs capable of displaying the at least one control and changing its opacity in response to the event;

application code to provide a plurality of application programs, at least one of the application programs capable of performing the at least one action of the at least one control; and

an operating environment to provide the application code and the controls code.

68. The computer system of claim 67 wherein the variable opacity is opaque.

69. The computer system of claim 67 wherein the variable opacity is transparent.

70. The computer system of claim 67 wherein the variable opacity is semi-transparent.

71. The computer system of claim 70 wherein the at least one of the plurality of control programs is capable of using dithering to display the semi-transparent variable opacity of the at least one control.

72. The computer system of claim 70 wherein the at least one of the plurality of control programs is capable of displaying only the edges of the at least one control to give an appearance of molded glass.

SUPPLEMENTAL PRELIMINARY AMENDMENT

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Title: MUTATABLY TRANSPARENT DISPLAYS

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B' 73. The computer system of claim 70 wherein the at least one of the plurality of control programs is capable of using alpha-blending to display the semi-transparent variable opacity of the at least one control.

74. The computer system of claim 67 wherein one of the plurality of application programs operates a video cassette recorder.

75. The computer system of claim 74 wherein one of the at least one control has a variable opacity of opaque and an action of play.

76. The computer system of claim 75 wherein the event is selecting the play action and one of the plurality of control programs changes the variable opacity of the at least one control from opaque to transparent.

77. The computer system of claim 76 wherein one of the at least one control has an action of pause and a variable opacity of semi-transparent and another of the at least one control has an action of stop and a variable opacity of semi-transparent.
